

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
Before the Board of Patent Appeals and Interferences

Applicant : Mark Penny et al.
Serial No. : 09/992,991
Filed : November 19, 2001
For : A System and Method For Processing Patient Medical Information
Examiner : Russell Glass
Art Unit : 3626

APPEAL BRIEF

May It Please The Honorable Board:

Appellants appeal the Final Rejection, dated July 17, 2007 of claims 1-23 of the above identified application. The fee of five hundred and ten dollars (\$510.00) for filing this Brief and the fee of one hundred and twenty dollars (\$120) for a one month extension of time is being paid by credit card. Please charge any additional fee or credit any overpayment to Deposit Account No. 50-2828. Enclosed is a single copy of this Brief.

Appellants do not request an oral hearing.

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I. REAL PARTY IN INTEREST

The real party in interest of Application Serial No. 09/992,991 is the Assignee of record:

Draeger Medical Systems
16 Electronics Ave.
Danvers, Massachusetts 01923

II. RELATED APPEALS AND INTERFERENCES

There are currently, and have been, no related Appeals or Interferences regarding Application Serial No. 09/992,991.

III. STATUS OF THE CLAIMS

Claims 1–23 are rejected and the rejection of claims 1–23 is appealed.

III. STATUS OF THE AMENDMENTS

All amendments were entered and are reflected in the claims included in Appendix I. No amendments were made to the claims after the Final Rejection.

V. SUMMARY OF CLAIMED SUBJECT MATTER

Independent claim 1 provides an apparatus for displaying medical information derived from a plurality of sources (page 2, lines 9-11, 15-18). A communication processor acquires medical parameters associated with a patient, including laboratory results (page 2, lines 11-15; page 6, lines 5-9). A processor collates acquired medical parameters for storage in a database and allocates visual attributes to the acquired medical parameters for identifying at least one of (i) newly acquired laboratory test results and (ii) patients associated with a particular care unit. A device for searching the database of acquired medical parameters to find specific laboratory test results based on one or more of (a) a text string identifying a portion of a laboratory test name, (b) a patient identifier, and (c) a date, for display of the acquired medical parameters and allocated visual attributes in a desired order (page 2, lines 11-14). An image processor for generating a display image including a first data window for displaying the specified

laboratory results and a second navigation window displaying a date field and time field for individual received laboratory messages and allocated visual attributes are displayed in the navigation window adjacent individual date and time fields and identifying newly acquired laboratory test results (page 7, lines 18-30; Fig. 3).

Dependent claim 10 includes the features of independent claim 1, along with the additional feature that the allocated attribute identifies unreviewed test results (page 8, line 34-page 9, line 7; Fig. 3).

Dependent claim 11 includes the features of dependent claim 10, along with the additional feature that the attribute is a predetermined color (page 8, line 34-page 9, line 18; Fig. 3).

Dependent claim 12 includes the features of independent claim 1, along with the additional feature that the collation processor allocates an attribute for identifying laboratory test results that are outside a predetermined range level (page 9, lines 9-18; Fig. 3).

Dependent claim 13 includes the features of dependent claim 12, along with the additional feature that the attribute is a predetermined color (page 9, lines 9-18; Fig. 3).

Independent claim 14 provides an internet compatible method for displaying medical information derived from a plurality of sources. Medical parameters associated with a patient including patient laboratory results are acquired. Then, the acquired medical parameters are collated for storage in a database. The database of acquired medical parameters is searched to find specific laboratory test results based on one or more of a (a) a text string identifying a portion of a laboratory test name, (b) a patient identifier, and (c) a date, for display in a desired order (Application, page 2, lines 9-13). Visual attributes are allocated to the acquired medical parameters for identifying at least one of newly acquired laboratory test results and patients associated with a predetermined care unit. A display image is generated and includes a first data window for displaying

the specified laboratory results and a second navigation window displaying a date field and time field for each receiving laboratory message; the allocated visual attributes being displayed in the navigation window adjacent each date and time field and identifying newly acquired laboratory test results (Application, page 11, lines 9-18).

Dependent claim 16 includes the features of independent claim 14, along with the additional feature that the step of allocating an attribute identifies unreviewed test results (Application, page 11, lines 9-18).

Dependent claim 17 includes the features of independent claim 14, along with the additional steps of allocating an attribute for identifying laboratory test results that are outside a predetermined range level (Application, page 11, lines 9-18).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1-9, 14, 15, 18-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacobus et al., (U.S. Pub. 2005/0209891), in view of Kehr, (U.S. 2003/0036683).

Claims 10-13, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacobus et al., (U.S. Pub. 2005/0209891), in view of Kehr, (U.S. 2003/0036683), and further in view of Cairnes, (U.S. 6,139,494).

VII. ARGUMENT

Applicants respectfully submit that Jacobus, in combination with either Kehr or Cairnes, fails to show or suggest the claimed arrangement. Thus, reversal of the Final Rejection (hereinafter termed "rejection") of claims 1-23 under 35 USC 103(a) is respectfully requested.

Rejection of claims 1–9, 14, 15, 18–23 are rejected under 35 U.S.C. 103(a) over Jacobus et al. (U.S. Pub. 2005/0209891) in view of Kehr (U.S. Pub. 2003/0036683)

Reversal of the rejection of claims 1–9, 14, 15, 18–23 under 35 U.S.C. § 103(a) as being unpatentable over Jacobus et al. (U.S. Pub. 2005/0209891) in view of Kehr (U.S. Pub. 2003/0036683) is respectfully requested because the rejection makes crucial errors in interpreting the cited reference. The rejection erroneously states that claims 1–9, 14, 15, 18–23 are made unpatentable over Jacobus in view of Kehr.

Overview of the Cited References

Jacobus describes a system wherein medical records, clinical observations and medical imagery are organized and aggregated into a common database, enabling the data to be viewed and updated (Jacobus, abstract). Specifically, data can be uploaded or updated by users or instruments. If updated by instruments, a Clinical Observation and Analysis System (COA) is used to collect and format the data (Jacobus, para. [0051]). Additionally, Jacobus provides that proprietary data may be decoded and encrypted for transfer over public carriers and decrypted for later storage thereof.

Kehr describes a method and system that allows a user to remotely modify medical protocols, including individual patient protocols. Additionally, Kehr describes a method and system for converting a medical treatment plan of a patient into steps that are prompted and recorded, and allows modification of the plan remotely (Kehr, abstract).

Cairnes describes an integrated clinical tele-informatics based system that provides outpatient health care delivery, self-care services, clinical communications and information, and clinical practice management services. The system retrieves and analyzes sign and symptom data of patients according to a plurality of case management rules, generates a patient information and develops a therapeutic program in response to the information. The therapeutic program is regularly updated based upon system monitoring of the patient's condition. The system provides clinical management functional tools that alert a Personal Health Advisor when the data of at least one patient exceeds predefined medical parameters, triage clinical activity of volumes of patients

based on the patient data, transform the data into clinical practice management information, and generate clinical practice management information reports of summarized text, numerical representations, and/or graphical representations (see Abstract)

CLAIMS 1 2-9, 20 and 22

Independent claim 1 provides an apparatus for displaying medical information derived from a plurality of sources. A communication processor acquires medical parameters associated with a patient, including laboratory results. A processor collates acquired medical parameters for storage in a database and allocates visual attributes to the acquired medical parameters for identifying at least one of (i) newly acquired laboratory test results and (ii) patients associated with a particular care unit. A device for searching the database of acquired medical parameters to find specific laboratory test results based on one or more of (a) a text string identifying a portion of a laboratory test name, (b) a patient identifier, and (c) a date, for display of the acquired medical parameters and allocated visual attributes in a desired order. An image processor for generating a display image including a first data window for displaying the specified laboratory results and a second navigation window displaying a date field and time field for individual received laboratory messages and allocated visual attributes are displayed in the navigation window adjacent individual date and time fields and identifying newly acquired laboratory test results. For the reasons presented below, Applicant respectfully submits that Jacobus alone or in combination with Kehr fail to disclose or suggest each feature claimed in the present claimed arrangement.

The claimed arrangement provides “a display window 300 comprising a navigator panel portion 310 and a results portion 320 is displayed in response to a user request for access to particular medical parameter data associated with a given patient” (Application, page 7, lines 20-22). Specifically, “the navigator panel display portion 310 displays the results of a search of the data base 25, including the date field 3101 and time field 3105 that a laboratory message was received, the laboratory result number 3109...[e]ach of the laboratory messages 3109 is shown in the navigator panel portion 310 in date and time sequence order” (Application, page 7, lines 26-30). A user may select to display “a direct

link or association to each of the corresponding laboratory test results 3110-3113 for display in the results display portion” (Application, page 7, line 35-page 8, line 6). User selection can provide additional detailed patient medical information for each specific laboratory test on the display window. The navigation window “includes a search field 3130 enabling a user to enter a text string portion corresponding to a type of laboratory test...this provides the user with even more efficient and customizable display of medical test results data” (Application, page 8, lines 27-32).

Contrary to the claimed arrangement, Jacobus describes a method that “actively tracks all new data...manages and records the date, time, and method by which physicians were notified about the new patient data” (Jacobus, para. [0264]). Jacobus is merely concerned with allowing data to be viewed or updated world-wide, therefore it is wholly unlike the claimed arrangement which satisfies the medical need for “a faster, more effective and user friendly means for accessing, correlating and displaying patient medical information derived from a plurality of sources” (Application, page 1, lines 31-33).

The Office Action on page 3 recognizes that “Jacobus fails to disclose an image processor for generating a display image including a first data window for displaying the specified laboratory results and a second navigation window displaying a date field and a time field for individually received laboratory messages and allocated visual attributes are displayed in said navigation window adjacent to individual data and time fields and identifying newly acquired laboratory test results” as in the present claimed arrangement. However, Applicant respectfully submits that even if the system of Jacobson was combined with the system of Kehr, the combined system would not disclose or suggest the claimed system.

Kehr merely discloses a method and system for remotely modifying medical protocols in addition to individual patient protocols (Kehr, abstract). Kehr also describes a system and method for “translating a complex medical treatment plan of a medical

outpatient into a sequential series of automated, prompt and record events presented over time” (Kehr, abstract).

The Office Action states that Kehr discloses an “image processor” similar to the one in the claimed arrangement. Applicants respectfully disagree. The section of Kehr relied on in the Rejection, Figures 6-8 fail to disclose or suggest a “display image including a first data window for displaying specified laboratory results and a second navigation window displaying a date field and a time field for individually received laboratory messages.” Kehr merely disclose an image for showing patient data and clinical test results (see Kehr para. [0096]-[0097]). In fact, the only description provided by Kehr regarding Figures 6 – 8 is the following:

“As shown in FIGS. 6-8, the patient records include personal identification, demographics, physiological data, health status, other treatment information, and the like, pertaining to the patients being monitored or treated by healthcare system 100.” (para. 0096).

There is nothing in this one sentence description that contemplates a multi-window display image that displays laboratory test results in a first window that are specifically requested by a search and a second “a navigation window” that displays “individual received laboratory messages and allocated visual attributes” that identify the message being a “newly acquired laboratory test result”. Kehr, merely provides a multi-window data structure for patient records that are stored in a patient database and are accessible by multiple parties (para. 0097 – 0099). Thus, Kehr is fundamentally different from the claimed arrangement that provides a display window that displays additional information as well as laboratory test results within a composite window, allowing an efficient summary of patients within a certain search criteria. (Application, fig. 4). Kehr is concerned solely with monitoring and modifying protocols and not with giving a patient care giver easy access to view “a window displaying a date field and time field for individual received laboratory messages and allocated visual attributes...in said navigation window adjacent individual date and time fields and **identifying newly acquired laboratory test results**” as in the claimed arrangement. The claimed

arrangement, unlike Kehr (with Jacobus) allocates attributes to a generated display in order to make it easier for a user to “quickly ascertain potentially new laboratory test results” (Application, page 9, line 5). These can be in the form of a display indicator or a flag that is placed on the generated display next to any labs that have not been reviewed or selected for review (Fig. 3). This satisfies a care giver’s need to “easily access, view, or determine the results of multiple medical tests or other data associated with a patient” (Application, page 1, lines 29-30). The present claim invention’s allocation of attributes to unreviewed laboratory test results makes a care giver more efficient in determining a patient’s needs by quickly and easily seeing if there is new laboratory data or test results that have not yet been evaluated. Kehr (with Jacobus) fail to disclose this feature. Instead, the cited section of Kehr merely provides a structure for a data record for a patient and fails to provide enabling disclosure of the display image of the present claimed arrangement. There is no mention of or any depiction of the present claimed “allocated visual attributes” being “display in said navigation window adjacent individual date and time fields and **identifying newly acquired laboratory results**” as in the claimed arrangement.

Additionally, Applicant respectfully submits that the combination of systems disclosed by Jacobus and Kehr would produce an inoperable system. Specifically, Jacobus is concerned with a records management system to coordinate and aggregate multiple patient records from different sources and provide access to these records via the internet (Jacobus, para. 0018). This is fundamentally different from and unrelated to the Kehr system which seeks to present a treatment regimen for persons with a chronic disease and provide step by step monitoring of the patients to ensure compliance with the regimen (Kehr, para. 0057-0059). To combine the treatment monitoring system of Kehr would radically alter the functionality of the Jacobus system which merely presents multiple access points to enable patients, physicians and other healthcare related entities to submit data for use as a standardized patient record database. The real-time functions of the Kehr system are useful only in the sense of monitoring patient progress on a treatment regimen and would tax the system architecture of the Jacobus system to a degree that would render the Jacobus system inoperable as Jacobus is merely a central

database for collecting different patient data from different sources and is NOT able to accomplish real-time monitoring or any monitoring of patient activity beyond determining whether or not patient data has been received.

In view of the inoperability of any system resulting from combining the system of Jacobus with the system of Kehr, Applicant respectfully submits that, contrary to the assertion in the Rejection, it would NOT be obvious to combine Jacobus and Kehr based on the motivation “to use a real-time, time and event driven patient monitoring system to assist patients and their caregivers by converting a complex treatment plan into a series of simple steps” which may be found in the Abstract of Kehr. The systems are fundamentally different from one another.

Furthermore, even if one were able to combine Jacobus to produce an operable system, the system would not provide any enabling disclosure of the claimed arrangement. Specifically, any combined system fails to disclose or suggest the claimed “image processor for generating a display image including a first data window for displaying the specified laboratory results and a second navigation window displaying a date field and time field for individual received laboratory messages and allocated visual attributes are displayed in said navigation window adjacent individual data and time fields and identifying newly acquired laboratory test results” as claimed in the present invention. Consequently, withdrawal of the rejection of claim 1 is respectfully requested.

Dependent claims 2-9, 20 and 22 are considered to be patentable based on their dependence on independent claim 1. Therefore all arguments presented above with respect to claim 1 also apply to claims 2-9, 20 and 22. Consequently, withdrawal of the rejections of claims 2 – 9, 20 and 22 is respectfully requested.

CLAIMS 14, 15 and 18, 19, 21 and 23

Independent claim 14 provides an internet compatible method for displaying medical information derived from a plurality of sources. Medical parameters associated with a patient including patient laboratory results are acquired. Then, the acquired

medical parameters are collated for storage in a database. The database of acquired medical parameters is searched to find specific laboratory test results based on one or more of a (a) a text string identifying a portion of a laboratory test name, (b) a patient identifier, and (c) a date, for display in a desired order. Visual attributes are allocated to the acquired medical parameters for identifying at least one of newly acquired laboratory test results and patients associated with a predetermined care unit. A display image is generated and includes a first data window for displaying the specified laboratory results and a second navigation window displaying a date field and time field for each receiving laboratory message; the allocated visual attributes being displayed in the navigation window adjacent each date and time field and identifying newly acquired laboratory test results.

The claimed arrangement provides “a display window 300 comprising a navigator panel portion 310 and a results portion 320 is displayed in response to a user request for access to particular medical parameter data associated with a given patient” (Application, page 7, lines 20-22). Specifically, “the navigator panel display portion 310 displays the results of a search of the data base 25, including the date field 3101 and time field 3105 that a laboratory message was received, the laboratory result number 3109...[e]ach of the laboratory messages 3109 is shown in the navigator panel portion 310 in date and time sequence order” (Application, page 7, lines 26-30). A user may select to display “a direct link or association to each of the corresponding laboratory test results 3110-3113 for display in the results display portion” (Application, page 7, line 35-page 8, line 6). User selection can provide additional detailed patient medical information for each specific laboratory test on the display window. The navigation window “includes a search field 3130 enabling a user to enter a text string portion corresponding to a type of laboratory test...this provides the user with even more efficient and customizable display of medical test results data” (Application, page 8, lines 27-32).

Contrary to the claimed arrangement, Jacobus describes a method that “actively tracks all new data...manages and records the date, time, and method by which physicians were notified about the new patient data” (Jacobus, para. [0264]). Jacobus is

merely concerned with allowing data to be viewed or updated world-wide, therefore it is wholly unlike the claimed arrangement which satisfies the medical need for “a faster, more effective and user friendly means for accessing, correlating and displaying patient medical information derived from a plurality of sources” (Application, page 1, lines 31-33).

The Office Action on page 3 recognizes that “Jacobus fails to disclose generating a display image including a first data window for displaying the specified laboratory results and a second navigation window displaying a date field and a time field for individually received laboratory messages and allocated visual attributes are displayed in said navigation window adjacent to individual data and time fields and identifying newly acquired laboratory test results” as in the claimed arrangement. However, Applicant respectfully submits that even if the system of Jacobson was combined with the system of Kehr, the combined system would not disclose or suggest the principles of the claimed arrangement.

Kehr merely discloses a method and system for remotely modifying medical protocols in addition to individual patient protocols (Kehr, abstract). Kehr also describes a system and method for “translating a complex medical treatment plan of a medical outpatient into a sequential series of automated, prompt and record events presented over time” (Kehr, abstract).

The Office Action states that Kehr discloses the claimed activity of “generating a display image” similar to the one in the claimed arrangement. Applicants respectfully disagree. The section of Kehr relied on in the Rejection, Figures 6-8 fails to disclose or suggest a “display image including a first data window for displaying specified laboratory results and a second navigation window displaying a date field and a time field for each received laboratory messages.” Kehr merely disclose an image for showing patient data and clinical test results (see Kehr para. [0096]-[0097]). In fact, the only description provided by Kehr regarding Figures 6 – 8 is the following:

“As shown in FIGS. 6-8, the patient records include personal identification, demographics, physiological data, health status, other treatment information, and the like, pertaining to the patients being monitored or treated by healthcare system 100.” (para. 0096).

There is nothing in this one sentence description that contemplates a multi-window display image that displays laboratory test results in a first window that are specifically requested by a search and a second “a navigation window” that displays “individual received laboratory messages and allocated visual attributes” that identify the message being a “newly acquired laboratory test result”. Kehr, merely provides a multi-window data structure for patient records that are stored in a patient database and are accessible by multiple parties (para. 0097 – 0099). Thus, Kehr is fundamentally different from the claimed arrangement that provides a display window that displays additional information as well as laboratory test results within a composite window, allowing an efficient summary of patients within a certain search criteria. (Application, fig. 4). Kehr is concerned solely with monitoring and modifying protocols and not with giving a patient care giver easy access to view “a window displaying a date field and time field for individual received laboratory messages and allocated visual attributes...in said navigation window adjacent individual date and time fields and **identifying newly acquired laboratory test results**” as in the claimed arrangement. The claimed arrangement, unlike Kehr (with Jacobus) allocates attributes to a generated display in order to make it easier for a user to “quickly ascertain potentially new laboratory test results” (Application, page 9, line 5). These can be in the form of a display indicator or a flag that is placed on the generated display next to any labs that have not been reviewed or selected for review (Fig. 3). This satisfies a care giver’s need to “easily access, view, or determine the results of multiple medical tests or other data associated with a patient” (Application, page 1, lines 29-30). The present claim invention’s allocation of attributes to unreviewed laboratory test results makes a care giver more efficient in determining a patient’s needs by quickly and easily seeing if there is new laboratory data or test results that have not yet been evaluated. Kehr (with Jacobus) fail to disclose this feature. Instead, the cited section of Kehr merely provides a structure for a data record for a patient and fails to provide enabling disclosure of the display image of the present claimed

arrangement. There is no mention of or any depiction of the present claimed “allocated visual attributes” being “display in said navigation window adjacent individual date and time fields and **identifying newly acquired laboratory results**” as in the claimed arrangement.

Additionally, Applicant respectfully submits that the combination of systems disclosed by Jacobus and Kehr would produce an inoperable system. Specifically, Jacobus is concerned with a records management system to coordinate and aggregate multiple patient records from different sources and provide access to these records via the internet (Jacobus, para. 0018). This is fundamentally different from and unrelated to the Kehr system which seeks to present a treatment regimen for persons with a chronic disease and provide step by step monitoring of the patients to ensure compliance with the regimen (Kehr, para. 0057-0059). To combine the treatment monitoring system of Kehr would radically alter the functionality of the Jacobus system which merely presents multiple access points to enable patients, physicians and other healthcare related entities to submit data for use as a standardized patient record database. The real-time functions of the Kehr system are useful only in the sense of monitoring patient progress on a treatment regimen and would tax the system architecture of the Jacobus system to a degree that would render the Jacobus system inoperable as Jacobus is merely a central database for collecting different patient data from different sources and is NOT able to accomplish real-time monitoring or any monitoring of patient activity beyond determining whether or not patient data has been received.

In view of the inoperability of any system resulting from combining the system of Jacobus with the system of Kehr, Applicant respectfully submits that, contrary to the assertion in the Rejection, it would NOT be obvious to combine Jacobus and Kehr based on the motivation “to use a real-time, time and event driven patient monitoring system to assist patients and their caregivers by converting a complex treatment plan into a series of simple steps” which may be found in the Abstract of Kehr. The systems are fundamentally different from one another.

Furthermore, even if one were able to combine Jacobus to produce an operable system, the system would not provide any enabling disclosure of the claimed arrangement. Specifically, any combined system fails to disclose or suggest the claimed “generating a display image including a first data window for displaying the specified laboratory results and a second navigation window displaying a date field and time field for individual received laboratory messages and allocated visual attributes are displayed in said navigation window adjacent individual data and time fields and identifying newly acquired laboratory test results” as claimed in the present invention. Consequently, withdrawal of the rejection of claim 14 is respectfully requested.

Dependent claims 15, 18, 19, 21 and 23 are considered to be patentable based on their dependence on independent claim 14. Therefore all arguments presented above with respect to claim 14 also apply to claims 15, 18-19, 21 and 23. Consequently, withdrawal of the rejection of claims 15, 18, 19, 21 and 23 is respectfully requested.

In view of the above remarks, Applicant respectfully submits that Jacobus alone or in combination with Kehr fails to make claims 1 or 14 unpatentable. As claims 2-9, 15 and 18-23 are dependent on claim 1 or 14, it is respectfully submitted that these claims are allowable for the same reasons as discussed above regarding claim 1 or 14. Consequently, it is respectfully requested that the rejection under 35 USC 103(a) be withdrawn.

Rejection of claims 10–13, 16 and 17 are rejected under 35 U.S.C. 103(a) over Jacobus et al. (U.S. Pub. 2005/0209891) in view of Kehr (U.S. Pub. 2003/0036683) and further in view of Cairnes (U.S. 6,139,494)

CLAIM 10 - 13

Dependent claim 10 is considered patentable for the reasons presented above with respect to claim 1. Claim 10 is also considered patentable because Cairnes (with Jacobus and/or Kehr) fails to disclose or suggest that “said allocated attribute identifies unreviewed test results” as in the present claimed arrangement. Claim 10 is also considered patentable because, unlike Cairnes (with Jacobus and/or Kehr) the claimed arrangement allocates attributes to a generated display in order to make it easier for a user to “quickly ascertain potentially new laboratory test results” (Application, page 9, line 5). These can be in the form of a display indicator or a flag that is placed on the generated display next to any labs that have not been reviewed or selected for review (Fig. 3). This satisfies a care giver’s need to “easily access, view, or determine the results of multiple medical tests or other data associated with a patient” (Application, page 1, lines 29-30). The present claim invention’s allocation of attributes to unreviewed laboratory test results makes a care giver more efficient in determining a patient’s needs by quickly and easily seeing if there is new laboratory data or test results that have not yet been evaluated.

The Rejection notes that Cairnes discloses attributes for reminders, alerts, and daily-triggered critical agenda. Applicants respectfully submit that the examiner meant “daily triaged clinical agenda” (Cairnes, col. 8, lines 56-67). However, no matter which meaning is contemplated, Cairnes is wholly unlike the claimed arrangement, either separately or combined with Jacobus with Kehr. The purpose of Cairnes is to generate alerts or reminders when patient data exceeds a predefined medical parameter and generate a triaged clinical agenda that prioritizes patients based on health care needs (Cairnes, col. 8, lines 56-67). This is meant for a high-priority or emergency situation so that a patients with the most critical needs are helped as early as possible. The claimed arrangement, on the other hand, is not concerned merely with prioritizing patients’ needs based on predetermined parameters, but instead allows a care giver to stay organized and

efficient when evaluating the laboratory test results of a patient and being immediately aware of potentially new and unevaluated laboratory results.

Cairnes describes a medical diagnosis system that provides outpatient healthcare delivery and information to users. Symptom data is received and analyzed according to case management rules. Cairnes further generates patient information and develops a therapeutic program that is selectively updateable. However, Cairnes, similarly to Jacobus and Kehr, neither discloses nor suggests “an image processor for generating a display image including a first data window for displaying the specified laboratory results and a second navigation window displaying a date field and time field for each receiving laboratory message” and “allocated visual attributes being displayed in the navigation window adjacent each date and time field and identifying newly acquired laboratory test results” as recited in the claimed arrangement. Accordingly, Cairnes neither discloses nor suggests “a processor for collating acquired medical parameters for storage in a database and allocating visual attributes to the acquired medical parameters for identifying at least one of (a) newly acquired laboratory test results and (b) patients associated with a particular care unit” and “a device for searching said database of acquired medical parameters to find specific laboratory test results based on one or more of (a) a text string identifying a portion of a laboratory test name, (b) a patient identifier, and (c) a date, for display of the acquired medical parameters and allocated visual attributes in a desired order” as recited in the claimed arrangement.

Applicant respectfully submits that there is also no reason or motivation to combine the system disclosed by Jacobus with Kehr with the system disclosed by Cairnes. Specifically, Jacobus merely discloses a medical data aggregation system that centralizes patient information and allows for easy access of this information (Jacobus, para. [0018]), and Kehr merely discloses a method and apparatus to remotely modify medical protocols or treatment plans and monitor patient progress (Kehr, abstract) and the combination of Jacobus of Kehr provides an unstable and inoperable system. Contrary to both Jacobus with Kehr and the claimed invention, Cairnes describes a system for providing outpatient care that provides an outpatient with a therapeutic program based on predetermined

management rules. The treatment program described in Cairnes is produced using data obtained and analyzed by the system according to these management rules to produce a treatment program. Jacobus merely aggregates the data and provides access to the data over the Internet and Kehr merely allows internet monitoring and modification of patient treatment protocols. Therefore, these systems are intended to accomplish entirely unrelated objectives and provide no common problem recognition. Thus, it is respectfully submitted that it would not have been obvious to combine the systems of Jacobus with Kehr and Cairnes.

Even if there was a motivation to combine the systems of Jacobus with Kehr and Cairnes, the combined system would not produce the claimed arrangement. Instead, the system resulting from the above combination would yield a system that organizes and aggregates patient information into a common database and provides an outpatient with a therapeutic program based on predetermined management rules that can be remotely monitored or modified. This is wholly unlike the claimed arrangement and provides no common problem recognition with the claimed arrangement. Specifically, it is respectfully submitted that the combination of Jacobus with Kehr and Cairnes neither discloses nor suggests “an image processor for generating a display image including a first data window for displaying the specified laboratory results and a second navigation window displaying a date field and time field for each receiving laboratory message” and “allocated visual attributes being displayed in the navigation window adjacent each date and time field and identifying newly acquired laboratory test results” as recited in the claimed arrangement. It is further respectfully submitted that the combination of Jacobus with Kehr and Cairnes neither discloses nor suggests “a processor for collating acquired medical parameters for storage in a database and allocating visual attributes to the acquired medical parameters for identifying at least one of (a) newly acquired laboratory test results and (b) patients associated with a particular care unit” and “a device for searching said database of acquired medical parameters to find specific laboratory test results based on one or more of (a) a text string identifying a portion of a laboratory test name, (b) a patient identifier, and (c) a date, for display of the acquired medical parameters and allocated visual attributes in a desired order” as recited in claimed

arrangement. Consequently, withdrawal of the rejection of claim 10 is respectfully requested.

Claim 11 is dependent on claim 10 and is considered patentable for the reasons presented above with respect to claims 1 and 10. Consequently, withdrawal of the rejection of claim 11 is respectfully requested.

Claim 12 is dependent on claim 1 and is considered patentable for the reasons presented above with respect to claims 1 and 10. Consequently, withdrawal of the rejection of claim 12 is respectfully requested.

CLAIMS 16 and 17

Dependent claim 16 is considered patentable for the reasons presented above with respect to claim 1. Claim 16 is also considered patentable because Cairnes (with Jacobus and/or Kehr) fails to disclose or suggest that “said allocated attribute identifies unreviewed test results” as in the present claimed arrangement. Claim 16 is also considered patentable because, unlike Cairnes (with Jacobus and/or Kehr) the claimed arrangement allocates attributes to a generated display in order to make it easier for a user to “quickly ascertain potentially new laboratory test results” (Application, page 9, line 5). These can be in the form of a display indicator or a flag that is placed on the generated display next to any labs that have not been reviewed or selected for review (Fig. 3). This satisfies a care giver’s need to “easily access, view, or determine the results of multiple medical tests or other data associated with a patient” (Application, page 1, lines 29-30). The present claim invention’s allocation of attributes to unreviewed laboratory test results makes a care giver more efficient in determining a patient’s needs by quickly and easily seeing if there is new laboratory data or test results that have not yet been evaluated.

The Rejection notes that Cairnes discloses attributes for reminders, alerts, and daily-triggered critical agenda. Applicants respectfully submit that the examiner meant “daily triaged clinical agenda” (Cairnes, col. 8, lines 56-67). However, no matter which meaning is contemplated, Cairnes is wholly unlike the claimed arrangement, either

separately or combined with Jacobus with Kehr. The purpose of Cairnes is to generate alerts or reminders when patient data exceeds a predefined medical parameter and generate a triaged clinical agenda that prioritizes patients based on health care needs (Cairnes, col. 8, lines 56-67). This is meant for a high-priority or emergency situation so that patients with the most critical needs are helped as early as possible. The claimed arrangement, on the other hand, is not concerned merely with prioritizing patients' needs based on predetermined parameters, but instead allows a care giver to stay organized and efficient when evaluating the laboratory test results of a patient and being immediately aware of potentially new and unevaluated laboratory results.

Cairnes describes a medical diagnosis system that provides outpatient healthcare delivery and information to users. Symptom data is received and analyzed according to case management rules. Cairnes further generates patient information and develops a therapeutic program that is selectively updateable. However, Cairnes, similarly to Jacobus and Kehr, neither discloses nor suggests "an image processor for generating a display image including a first data window for displaying the specified laboratory results and a second navigation window displaying a date field and time field for each receiving laboratory message" and "allocated visual attributes being displayed in the navigation window adjacent each date and time field and identifying newly acquired laboratory test results" as recited in the claimed arrangement. Accordingly, Cairnes neither discloses nor suggests "a processor for collating acquired medical parameters for storage in a database and allocating visual attributes to the acquired medical parameters for identifying at least one of (a) newly acquired laboratory test results and (b) patients associated with a particular care unit" and "a device for searching said database of acquired medical parameters to find specific laboratory test results based on one or more of (a) a text string identifying a portion of a laboratory test name, (b) a patient identifier, and (c) a date, for display of the acquired medical parameters and allocated visual attributes in a desired order" as recited in the claimed arrangement.

Applicant respectfully submits that there is also no reason or motivation to combine the system disclosed by Jacobus with Kehr with the system disclosed by Cairnes.

Specifically, Jacobus merely discloses a medical data aggregation system that centralizes patient information and allows for easy access of this information (Jacobus, para. [0018]), and Kehr merely discloses a method and apparatus to remotely modify medical protocols or treatment plans and monitor patient progress (Kehr, abstract) and in fact, as discussed above, the combination of Jacobus of Kehr would provide an unstable and inoperable system. Contrary to both Jacobus with Kehr and the claimed invention, Cairnes describes a system for providing outpatient care that provides an outpatient with a therapeutic program based on predetermined management rules. The treatment program described in Cairnes is produced by data obtained and analyzed by the system according to these management rules to produce a treatment program. Jacobus merely aggregates the data and provides access to the data over the Internet and Kehr merely allows internet monitoring and modification of patient treatment protocols. Therefore, these systems are intended to accomplish entirely unrelated objectives and provide no common problem recognition. Thus, it is respectfully submitted that it would not have been obvious to combine the systems of Jacobus with Kehr and Cairnes.

Even if there was a motivation to combine the systems of Jacobus with Kehr and Cairnes, the combined system would not produce the claimed arrangement. Instead, the system resulting from the above combination would yield a system that organizes and aggregates patient information into a common database and provides an outpatient with a therapeutic program based on predetermined management rules that can be remotely monitored or modified. This is wholly unlike the claimed arrangement and provides no common problem recognition with the claimed arrangement. Specifically, it is respectfully submitted that the combination of Jacobus with Kehr and Cairnes neither discloses nor suggests “an image processor for generating a display image including a first data window for displaying the specified laboratory results and a second navigation window displaying a date field and time field for each receiving laboratory message” and “allocated visual attributes being displayed in the navigation window adjacent each date and time field and identifying newly acquired laboratory test results” as recited in the claimed arrangement. It is further respectfully submitted that the combination of Jacobus with Kehr and Cairnes neither discloses nor suggests “a processor for collating acquired

medical parameters for storage in a database and allocating visual attributes to the acquired medical parameters for identifying at least one of (a) newly acquired laboratory test results and (b) patients associated with a particular care unit” and “a device for searching said database of acquired medical parameters to find specific laboratory test results based on one or more of (a) a text string identifying a portion of a laboratory test name, (b) a patient identifier, and (c) a date, for display of the acquired medical parameters and allocated visual attributes in a desired order” as recited in claimed arrangement. Consequently, withdrawal of the rejection of claim 16 is respectfully requested.

Claim 17 is dependent on claim 14 and is considered patentable for the reasons presented above with respect to claims 1, 14 and 16. Consequently, withdrawal of the rejection of claim 17 is respectfully requested.

In view of the above remarks, Applicants respectfully submit that Cairnes, when taken alone or in any combination with Jacobus and/or Kehr, fail to disclose or suggest the features of claims 1 and 14. As claims 10 – 13, 16 and 17 are dependent on either claims 1 or 14, Applicant respectfully submits that claims 10 – 13, 16 and 17 are similarly not made unpatentable by Cairnes with Jacobus and/or Kehr. Therefore, Applicant respectfully requests withdrawal of the rejection under 35 USC 103(a).

VIII. CONCLUSION

Jacobus, when taken alone or in combination with Kehr, neither discloses nor suggests “an image processor for generating a display image including a first data window for displaying the specified laboratory results and a second navigation window displaying a date field and time field for individual received laboratory messages and allocated visual attributes are displayed in the navigation window adjacent individual date and time fields and identifying newly acquired laboratory test results” as recited in claims 1 and 14 of the present invention. Additionally, Jacobus with Kehr, when taken alone or in combination with Cairnes, neither discloses nor suggests that “the allocated attribute identifies unreviewed test results” as in the present invention. Claims 10-13, 16

and 17 contain similar subject matter to claims 1 and 14 and are also patentable over Jacobus, Kehr and Cairnes, when taken alone or in combination. As claims 2-9, 15, and 18-23 are dependent on independent claims 1 and 14, these claims are also patentable over Jacobus, Kehr and Cairnes, when taken alone or in combination.

Accordingly, it is respectfully submitted that the rejection of Claims 1-23 should be reversed.

Respectfully submitted,

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APPENDIX I - APPEALED CLAIMS

1. (Previously Presented) An apparatus for displaying medical information derived from a plurality of sources, said apparatus comprising:

a communication processor for acquiring medical parameters associated with a patient including patient laboratory results;

a processor for collating acquired medical parameters for storage in a database and allocating visual attributes to the acquired medical parameters for identifying at least one of (i) newly acquired laboratory test results and (ii) patients associated with a particular care unit;

a device for searching said database of acquired medical parameters to find specific laboratory test results based on one or more of (a) a text string identifying a portion of a laboratory test name, (b) a patient identifier, and (c) a date, for display of the acquired medical parameters and allocated visual attributes in a desired order; and

an image processor for generating a display image including a first data window for displaying the specified laboratory results and a second navigation window displaying a date field and time field for individual received laboratory messages and allocated visual attributes are displayed in said navigation window adjacent individual date and time fields and identifying newly acquired laboratory test results.

2. (Previously Presented) The apparatus of claim 1, wherein said network is at least one of an internet or intra-net compatible network.

3. (Previously Presented) The apparatus of claim 1, wherein said collation processor orders said acquired patient laboratory test results by criteria including at least one of (a) test type, (b) date, (c) patient.

4. (Previously Presented) The apparatus of claim 1, wherein said searching is based on additional criteria including at least one of (a) patient name, (b) caregiver identifier, (c) text identifying a diagnosis, and (d) text identifying a procedure.

5. (Previously Presented) The apparatus of claim 1, wherein said communications processor acquires said test results from said plurality of sources using network protocols including one or more of (a) ASTM and (b) HL7.

6. (Previously Presented) The apparatus of claim 1, wherein said communication processor continuously acquires said results from one or more of (a) a hospital intranet, and (b) a patient monitoring system.

7. (Previously Presented) The apparatus of claim 1, wherein said system acquires and displays other information together with said test results in a composite display window, said other information including one or more of (a) ventilator status, (b) diagnosis information, (c) care unit identifier, (d) procedure, (e) caregiver indicator, and (f) laboratory test results indicator.

8. (Previously Presented) The apparatus of claim 1, further comprising a menu generator for generating a window for displaying said specific test results.

9. (Previously Presented) The apparatus of claim 8, wherein said menu generator comprises an internet browser.

10. (Previously Presented) The apparatus of claim 1, wherein said allocated attribute identifies unreviewed test results.

11. (Previously Presented) The apparatus of claim 10, wherein said attribute is a predetermined color.

12. (Previously Presented) The apparatus of claim 1, wherein said collation processor allocates an attribute for identifying laboratory test results that are outside a predetermined range level.

13. (Previously Presented) The apparatus of claim 12, wherein said attribute is a predetermined color.

14. (Previously Presented) An internet compatible method for displaying medical information derived from a plurality of sources, comprising steps of:

acquiring medical parameters associated with a patient including patient laboratory results;

collating said acquired medical parameters for storage in a database; and

searching said database of acquired medical parameters to find specific laboratory test results based on one or more of (a) a text string identifying a portion of a laboratory test name, (b) a patient identifier, and (c) a date, for display in a desired order;

allocating visual attributes to the acquired medical parameters for identifying at least one of newly acquired laboratory test results and patients associated with a predetermined care unit; and

generating a display image including a first data window for displaying the specified laboratory results and a second navigation window displaying a date field and time field for each receiving laboratory message; said allocated visual attributes being displayed in said navigation window adjacent each date and time field and identifying newly acquired laboratory test results.

15. (Original) The method of claim 14, further comprising the step of generating a window for displaying said laboratory test results.

16. (Previously Presented) The method of claim 14, wherein the step of allocating an attribute identifies unreviewed test results.

17. (Previously Presented) The method of claim 14, further comprising the step of allocating an attribute for identifying laboratory test results that are outside a predetermined range level.

18. (Previously Presented) The method of claim 14, further comprising the step of generating a first navigator window displaying results of a search and a second window including data representing parameters corresponding to a specific search result.

19. (Previously Presented) The method of claim 14, further comprising the step of generating a display including data representing information associated with patients meeting predetermined criteria.

20. (Previously Presented) The apparatus of claim 1, further comprising a display generator for generating a first navigator window displaying results of a search and a second window including data representing parameters corresponding to a specific search result.

21. (Previously Presented) The apparatus of claim 20, wherein said display generator generates a display including data representing information associated with patients meeting predetermined criteria.

22. (Previously Presented) The apparatus of claim 1, wherein said image processor generates a component display for displaying medical information for a plurality of patients; said allocated visual attributes being displayed in said component display and identifying newly acquired laboratory test results of corresponding patients.

23. (Previously Presented) The method of claim 14, further comprising the step of generating a component display for displaying medical information for a plurality of patients; said allocated visual attributes being displayed in said component display and identifying newly acquired laboratory test results of corresponding patients.

APPENDIX II - EVIDENCE

Applicants do not rely on any additional evidence other than the arguments submitted hereinabove.

APPENDIX III - RELATED PROCEEDINGS

Applicants respectfully submit that there are no proceedings related to this appeal in which any decisions were rendered.

APPENDIX IV - TABLE OF CASES

Applicant does not rely on any case law in support of this Appeal.

APPENDIX V - LIST OF REFERENCES

<u>U.S. Patent No./</u>	<u>Issued/Publication</u>	<u>102(e) Date</u>	<u>Inventors</u>
<u>Publication No.</u>	<u>Date</u>		
2005/0209891			Jacobus et al.
2003/0036683			Kehr et al.
6,139,494			Cairnes et al.

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